

## AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/DE 03/02061  
filed on June 20, 2003.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0001] with the following amended paragraph:

[0001] ~~Prior Art~~ Field of the Invention

Please replace paragraph [0002] with the following amended paragraph:

[0002] The invention is ~~based on a~~ directed to an improved high-pressure pump, in particular for a fuel injection system for an internal combustion engine, ~~as generically defined by the preamble to claim 1.~~

Please add the following new paragraph after paragraph [0002]:

[0002.5] Description of the Prior Art

Please replace paragraph [0003] with the following amended paragraph:

[0003] One ~~such~~ high-pressure pump ~~is~~ known from German Patent Disclosure DE 198 02 476 A1. ~~This high-pressure pump~~ has a pump housing in which a plurality of pump elements are disposed. ~~By means of the pump elements,~~ by means of which fuel is pumped via a high-pressure conduit system to a common high-pressure connection. The pump housing of the high-pressure pump is embodied in one piece, and the high-pressure conduit system has high-pressure bores, which extend through the pump housing and discharge into one another and thus form intersections. At high pressures, of the kind required for fuel injection systems for achieving high performance and low pollutant emissions in internal combustion engines, this puts high loads on the pump housing. The intersections of the high-

pressure bores create peak stresses in the pump housing, and the pump housing must be designed in terms of dimensions and material to meet these peak stresses. This also requires a complicated hardening treatment of the pump housing. For these reasons, the production of the high-pressure pump is expensive.

Please replace paragraph [0004] with the following amended paragraph:

[0004]        SUMMARY AND ADVANTAGES OF THE INVENTION

Please replace paragraph [0005] with the following amended paragraph:

[0005] The high-pressure pump of the invention ~~having the characteristics of claim 1~~ has the advantage over the prior art that because of the absence of intersections, there is less stress on the housing body and it can thus be made from a less-expensive material and in a simpler way, making the production of the high-pressure pump overall less expensive. Typically, the housing caps do have bores with intersections and must therefore be made of material of suitable strength anyway, so that further intersections of the high-pressure bores that occur there do not involve increased expense.

Page 2, please replace paragraph [0006] with the following amended paragraph:

[0006] Advantageous features and refinements of the high-pressure pump of the invention are disclosed ~~in the dependent claims~~.

Please replace paragraph [0007] with the following amended paragraph:

[0007]        BRIEF DESCRIPTION OF THE DRAWINGS        ~~DRAWING~~

Please replace paragraph [0008] with the following amended paragraph:

[0008] Other features and advantages of the invention will become apparent from the description contained herein below, taken with the drawings, in which: ~~Two exemplary embodiments of the invention are shown in the drawing and described in further detail~~

~~in the ensuing description. Fig. 1 shows a high-pressure pump in a longitudinal section; Fig. 2 shows the high-pressure pump in a cross section taken along the line II-II in Fig. 1 for a first exemplary embodiment; and Fig. 3 shows the high-pressure pump in cross section in a second exemplary embodiment.~~

Please add the following new paragraph after paragraph [0008]:

[0008.2] Fig. 1 shows a high-pressure pump in a longitudinal section;

Please add the following new paragraph after paragraph [0008.2]:

[0008.4] Fig. 2 shows the high-pressure pump in a cross section taken along the line II-II of Fig. 1 for a first exemplary embodiment; and

Please add the following new paragraph after paragraph [0008.4]:

[0008.6] Fig. 3 shows the high- pressure pump in cross section in a second exemplary embodiment.

Please replace paragraph [0009] with the following amended paragraph:

[0009] DESCRIPTION OF THE ~~EXEMPLARY~~ PREFERRED EMBODIMENTS

Please replace paragraph [0010] with the following amended paragraph:

[0010] In Figs. 1 through 3, a high-pressure pump is shown which is intended in particular for a fuel injection system for an internal combustion engine, for instance of a motor vehicle. By means of the high-pressure pump, fuel is pumped at high pressure of up to 2000 bar, for instance into a reservoir from which fuel is drawn for injection into the engine. The high-pressure pump has a multiple-part pump housing, which has a housing body 10, a flange part 12, and housing caps 14 that are joined to the housing body 10. A plurality of pump elements 16, for instance three, distributed uniformly over the circumference are disposed in the pump housing. A drive shaft 18 is rotatably supported in the housing body 10 and the flange part 12 and by means of it the pump elements 16 are driven. The drive shaft 18 is rotatably supported

about an axis 19 via a bearing point 20 in the housing body 10 and via a bearing point 22 in the flange part 12 and is driven by the engine in a manner not shown. The drive shaft 18 has an eccentric portion 24, on which a reciprocating ring 26 is supported. The pump elements 16 each have one pump piston 28, which is guided tightly and displaceably in a cylinder bore 30 that extends at least approximately radially to the drive shaft 18. The cylinder bores 30 of the pump elements 16 may be embodied in either the housing body 10 or the housing caps 14. For each pump element 16, one housing cap 14 is provided, covering it from the outside radially relative to the pivot axis 19 of the drive shaft 18. The pump piston 28 of each pump element 16 is braced with its piston base 29 on the reciprocating ring 26, and the piston base 29 is kept in contact with the reciprocating ring 26 by a spring 32, which is braced on one end on the housing body 10 or the housing cap 14 and on the other on the piston base 29.

Page 4, please replace paragraph [0013] with the following amended paragraph:

[0013] The high-pressure conduit system in the housing body 10 and in the housing caps 14a, b, c will now be described in further detail in conjunction with Fig. 2. In the two housing caps 14b, c, on which the high-pressure connection 42 is not disposed, one bore 50 each adjoining the respective outlet valve 40 leads away to the housing body 10. The bores 50 extend at least approximately radially to the pivot axis 19 of the drive shaft 18. The orifices of the bores 50 may be widened in diameter, for instance being conical or spherical. The housing caps 14a, b, c and the housing body 10 have at least approximately level faces 11 and 15, respectively, oriented toward ~~one another~~ and ~~on which they rest~~ resting on one another. High-pressure bores 52 and 54 extend in the housing body 10 and are connected to the respective bores 50 of the two housing caps 14b, c and lead to the housing cap 14a at which the common high-pressure connection 42 is disposed. In each of the faces 15 of the housing

body 10 oriented toward the housing caps 14b, c, a respective indentation 56 is made, at whose at least approximately level bottom 57 the high-pressure bore 52 and 54, respectively, discharges. The orifice of each high-pressure bore 52 and 54 at the bottom 57 of the indentation 56 is preferably rounded. This can be done with a shaping drill, which can be positioned against the level bottom 57 of the indentation 56. Each of the indentations 56 has a larger cross section than the high-pressure bores 52, 54. A sealing ring 58 surrounding the high-pressure bores 52, 54 is inserted into each of the indentations 56, and by means of it the transition from the bore 50 in the housing cap 14b, c to the high-pressure bore 52 and 54, respectively, in the housing part 10 is sealed off.

Page 6, please add the following new paragraph after paragraph [0015]:

[0016] The foregoing relates to preferred exemplary embodiments of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.